



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

July 23, 2003

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

RE: **MID CONTINENT coal & coke 089-16263-05224**

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.



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July 23, 2003

Mr. Carl Horst
Mid-Continent Coal and Coke Company
915 W. 175th Street
Homewood, Illinois 60430

Re: Minor Source Modification No:
089-16263-05224

Dear Mr. Horst:

Mid-Continent Coal and Coke Company applied for a Minor Source Modification for a portable source to be initially located at International Steel Group (ISG), 3001 Dickey Road, East Chicago, Indiana 46312. Pursuant to 326 IAC 2-7-10.5(d)(5) the following emission units are approved for construction at the source:

One (1) portable screening operation, with a maximum capacity of sixty (60) tons per hour, constructed in 2002, comprised of the following equipment:

- (a) One (1) coke screen;
- (b) Five (5) conveyors;
- (c) One (1) hopper; and
- (d) One (1) front-end loader with a diesel internal combustion engine with a maximum capacity of 180 hp.

The proposed Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). The source may begin operation upon issuance of the source modification approval.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Kristin Clapp, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (703) 633-1694 to speak directly to Ms. Clapp. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,
Original signed by
Phil Perry for
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/KC

cc: File - Lake County
U.S. EPA, Region V
Lake County Health Department
Air Compliance Section Inspector - Ramesh Tejuja
Compliance Data Section - Karen Nowak
Administrative and Development - Sara Cloe
Technical Support and Modeling - Michele Boner



Governor

Lori F. Kaplan
Commissioner

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PART 70 MINOR SOURCE MODIFICATION OFFICE OF AIR QUALITY

**Mid-Continent Coal and Coke Company
3001 Dickey Road
East Chicago, Indiana 46312
(Portable)**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Minor Source Modification No.: 089-16263-05224

Issued by:
Paul Dubenetzky, Branch Chief
Office of Air Quality

Issuance Date: **July 23, 2003**



TABLE OF CONTENTS

SECTION A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1-(22)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

SECTION B GENERAL CONSTRUCTION CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- B.2 Effective Date of the Permit [IC13-15-5-3]
- B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]
- B.4 Local Agency Requirement

SECTION C GENERAL OPERATION CONDITIONS

- C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
- C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]
- C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
- C.4 Opacity [326 IAC 5-1]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Lake County Particulate Matter Contingency Measures [326 IAC 6-1-11.2]
- C.7 Fugitive Dust Emissions [326 IAC 6-1-11.1]
- C.8 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]
- C.9 Operation of Equipment [326 IAC 2-7-6(6)]

Compliance Requirements [326 IAC 2-1.1-11]

- C.10 Compliance Requirements [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.13 Emergency Provisions [326 IAC 2-7-16]
- C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

Record Keeping and Reporting Requirements

- C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
- C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

Portable Source Requirement

- C.17 Relocation of Portable Sources [326 IAC 2-14-4]

SECTION D.1 FACILITY OPERATION CONDITIONS - Portable Coke Screening Operation

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 PSD Minor Limitation [326 IAC 2-2]
- D.1.2 Emission Offset Minor Limitations [326 IAC 2-3]
- D.1.3 Particulate Emission Limitations [326 IAC 6-3-2]

TABLE OF CONTENTS (Continued)

- D.1.4 Fugitive Particulate Matter (PM)
- D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.6 Particulate Matter (PM)

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.1.7 Record Keeping Requirements
- D.1.8 Reporting Requirements

Certification

Quarterly Report
Quarterly Report

SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a portable metallurgical coke screening plant.

Responsible Official:	Manager of Operations
Initial Source Address:	3001 Dickey Road, East Chicago, Indiana 46312
Initial Source Mailing Address:	915 W. 175 th Street, Homewood, IL 60430
General Source Phone Number:	(708) 798-1110
SIC Code:	5052
Initial County Location:	Lake
Source Location Status:	Nonattainment for Ozone, PM10, and SO ₂ Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD and Emission Offset Rules; 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This portable source is approved to construct and operate the following emission units and pollution control devices:

One (1) portable screening operation, with a maximum capacity of sixty (60) tons per hour, constructed in 2001, comprised of the following equipment:

- (a) One (1) coke screen;
- (b) Six (6) conveyors;
- (c) One (1) hopper; and
- (d) One (1) front-end loader with a diesel internal combustion engine with a maximum capacity of 180 hp.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This portable source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21).

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This portable source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);

- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [326 IAC 13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Local Agency Requirement

(a) If the portable coke screening plant seeks to move to an area under the jurisdiction of any applicable Local Air Pollution Control Agency (LAPCA), the LAPCA may enact additional air pollution control requirements. The Permittee should contact the LAPCA when planning to relocate into an applicable jurisdiction.

(b) The Local Air Pollution Control Agencies are:

Anderson

Jurisdiction: Madison County

Anderson Office of Air Management
P.O. Box 2100
120 East 8th Street, Anderson, IN 46011
(765) 648-6158 (Phone)
(765) 648-5924 (FAX)

East Chicago

Jurisdiction: City of East Chicago

East Chicago Department of Environmental Management
4522 Indianapolis Blvd., East Chicago, IN 46312
(219) 391-8297 (Phone)
(219) 391-8237 (FAX)

Evansville

Jurisdiction: City of Evansville plus four (4) miles beyond the corporate limits but not outside Vanderburgh County

City of Evansville EPA
101 Court Street, Rm 205, Evansville, IN 47708
(812) 435-6145 (Phone)
(812) 435-6155 (FAX)

Gary

Jurisdiction: City of Gary

Gary Department of Environmental Affairs

504 N. Broadway, Suite 1012, Gary, IN 46402
(219) 882-3007 (Phone)
(219) 882-3012 (FAX)

Hammond

Jurisdiction: City of Hammond

Hammond Department of Environmental Management
5925 Calumet Avenue, Hammond, IN 46320
(219) 853-6306 (Phone)
(219) 853-6343 (FAX)

Indianapolis

Jurisdiction: Marion County

Environmental Resources Management Division
Administration Building, 2700 South Belmont Ave, Indianapolis, IN 46221
(317) 327-2234 (Phone)
(317) 274-2274 (FAX)

St. Joseph County

Jurisdiction: St. Joseph County

St. Joseph County Health Department
County-City Building, Room 914, South Bend, IN 466601-1870
(219) 235-9721 (Phone)
(219) 235-9497 (FAX)

Vigo County

Jurisdiction: Vigo County

Vigo County Air Pollution Control
103 S. 3rd St., Terre Haute, IN 47807
(812) 462-3433 (Phone)
(812) 462-3433(FAX)

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit)

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit) upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit). IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described

in Condition B.4 of this permit) may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit)

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

C.4 Opacity [326 IAC 5-1]

As a portable source which can relocate to any county in Indiana and pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Lake County Particulate Matter Contingency Measures [326 IAC 6-1-11.2]

The Permittee shall comply with the applicable provisions of 326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures).

C.7 Fugitive Dust Emissions [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on July 31, 2002.

C.8 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on July 31, 2002. This plan indicates that the fugitive emissions will be controlled by spraying the unpaved roads with water on an as-needed basis.

C.9 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Emergency Provisions [326 IAC 2-7-16]

-
- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit) or regional office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit).

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit) may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit) by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
 - (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

-
- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a

description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this Permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit) makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit) within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit).

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and any applicable Local Air Pollution Control Agency (as described in Condition B.5 of this permit) on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Portable Source Requirement

C.17 Relocation of Portable Sources [326 IAC 2-14-4]

- (a) This permit is approved for operation in all areas of Indiana. A thirty (30) day advance notice of relocation must be given to IDEM, OAQ, and a "Relocation Site Approval" letter must be obtained before relocating. The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The Permittee shall also notify the applicable local air pollution control agency when relocating to, or from, one the following:
 - (1) Madison County - (Anderson Office of Air Quality)
 - (2) City of Evansville plus four (4) miles beyond the corporate limits but not outside Vanderburgh County - (Evansville EPA)
 - (3) City of Gary - (Gary Division of Air Pollution)
 - (4) City of Hammond - (Hammond Department of Environmental Management)
 - (5) Marion County - (Indianapolis Air Pollution Control Agency)
 - (6) St. Joseph County - (St. Joseph County Health Department)
 - (7) Vigo County - (Vigo County Air Pollution Department)
- (c) That a valid operation permit consists of this document and any subsequent "Relocation Site Approval" letter specifying the current location of the portable plant.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Portable Coke Screening Operation

One (1) portable screening operation, with a maximum capacity of sixty (60) tons per hour, constructed in 2001, comprised of the following equipment:

- (a) One (1) coke screen;
- (b) Six (6) conveyors;
- (c) One (1) hopper; and
- (d) One (1) front-end loader with a diesel internal combustion engine with a maximum capacity of 180 hp.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limitations [326 IAC 2-2]

- (a) The Permittee shall limit the throughput of coke to the portable coke screening operation to less than 121,800 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This is equivalent to PM emissions of 18.27 tons per year and PM10 emissions of 12.18 tons per year.
- (b) The Permittee shall limit the diesel fuel usage by the portable source to no greater than twenty-five (25) kilogallons per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is equivalent to PM and PM10 emissions of 0.55 tons per year, each.

These limits are structured such that, when including the fugitive emissions, PM emissions from the portable source are less than twenty-five (25) tons per year and PM10 emissions from the portable coke screening operation are less than fifteen (15) tons per year. Compliance with these limitations renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable. Therefore, the portable coke screening operation can relocate to any PSD major source and not be subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

D.1.2 Emission Offset Minor Limit [326 IAC 2-3]

- (a) The Permittee shall limit the throughput of coke to the portable coke screening operation to less than 121,800 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This is equivalent to PM emissions of 18.27 tons per year and PM10 emissions of 12.18 tons per year.
- (b) The Permittee shall limit the diesel fuel usage by the portable source to no greater than twenty-five (25) kilogallons per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is equivalent to PM and PM10 emissions of 0.55 tons per year, each.

These limits are structured such that, when including the fugitive emissions, PM emissions from the portable coke screening plant are less than twenty-five (25) tons per year and PM10 emissions from the portable coke screening operation are less than fifteen (15) tons per year. Compliance

with these limitations renders the requirements of 326 IAC 2-3 (Emission Offset) not applicable. Therefore, the portable coke screening operation can relocate to any Emission Offset major source in any nonattainment county and not be subject to the requirements of 326 IAC 2-3 (Emission Offset).

D.1.3 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the portable coke screening operation shall be limited to less than 46.29 pounds per hour when operating at a process weight rate of 60 tons per hour. This limit was calculated using the following equation.

Interpolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

D.1.4 Fugitive Particulate Matter (PM)

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), compliance with the opacity limits specified in Condition C.7 (Fugitive Dust Emissions) shall be achieved by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan (FDCP). If it is determined that the control procedures specified in the FDCP do not demonstrate compliance with the fugitive emission limitations, IDEM, OAQ may request that the FDCP be revised and submitted for approval.

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.1.6 Particulate Matter (PM)

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), opacity from the activities shall be determined as follows:

(a) Paved Roads and Parking Lots

The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:

- (1) The first will be taken at the time of emission generation.
- (2) The second will be taken five (5) seconds later.
- (3) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.

(b) Unpaved Roads and Parking Lots

The fugitive particulate emissions from unpaved roads shall be controlled by the implementation of a work program and work practice under the fugitive dust control plan.

- (c) **Batch Transfer**
The average instantaneous opacity shall consist of the average of three (3) opacity readings taken five (5) seconds, ten (10) seconds, and fifteen (15) seconds after the end of one (1) batch loading or unloading operation. The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.
- (d) **Continuous Transfer**
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9. The opacity readings shall be taken at least four (4) feet from the point of origin.
- (e) **Wind Erosion from Storage Piles**
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. The limitations may not apply during periods when application of fugitive particulate control measures are either ineffective or unreasonable due to sustained very high wind speeds. During such periods, the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind conditions.
- (f) **Wind Erosion from Exposed Areas**
The opacity shall be determined using 40 CFR 60, Appendix A, Method 9.
- (g) **Material Transported by Truck or Rail**
Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 22, except that the observation shall be taken at approximately right angles to the prevailing wind from the leeward side of the truck or railroad car. Material transported by truck or rail that is enclosed and covered shall be considered in compliance with the inplant transportation requirement.
- (h) **Material Transported by Front End Loader or Skip Hoist**
Compliance with this limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings shall be taken as follows:
 - (1) The first will be taken at the time of emission generation.
 - (2) The second will be taken five (5) seconds later.
 - (3) The third will be taken five (5) seconds later or ten (10) seconds after the first.The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand at least fifteen (15) feet from the plume approximately and at right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the roadway or parking area.
- (i) **Material Processing Limitations**
Compliance with all opacity limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 9. Compliance with all visible

emissions limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 22. Compliance with all particulate matter limitations from material processing equipment shall be determined using 40 CFR 60, Appendix A, Method 5 or 17.

- (j) Dust Handling Equipment
Compliance with this standard shall be determined by 40 CFR 60, Appendix A, Method 9.

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.7 Record Keeping Requirements

- (a) In order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records of the diesel fuel usage.
- (b) In order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records of metallurgical coke processed.
- (c) Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the source shall keep the following documentation to show compliance with each of its control measures and control practices:
 - (1) A map or diagram showing the location of all emission sources controlled, including the location, identification, length, and width of roadways.
 - (2) For each application of water or chemical solution to roadways, the following shall be recorded:
 - (A) The name and location of the roadway controlled
 - (B) Application rate
 - (C) Time of each application
 - (D) Width of each application
 - (E) Identification of each method of application
 - (F) Total quantity of water or chemical used for each application
 - (G) For each application of chemical solution, the concentration and identity of the chemical
 - (H) The material data safety sheets for each chemical
 - (3) For application of physical or chemical control agents not covered by 326 IAC 6-1-11.1(B), the following:
 - (A) The name of the agent
 - (B) Location of application
 - (C) Application rate
 - (D) Total quantity of agent used

- (E) If diluted, percent of concentration
- (F) The material data safety sheets for each chemical
- (4) A log recording incidents when control measures were not used and a statement of explanation.
- (5) Copies of all records required by this section shall be submitted to the department within twenty (20) working days of a written request by the department.
- (d) To document compliance with Condition D.1.5, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.8 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), a quarterly report shall be submitted, stating the following:
 - (1) The dates any required control measures were not implemented
 - (2) A listing of those control measures
 - (3) The reasons that the control measures were not implemented
 - (4) Any corrective action taken

These reports shall be submitted within thirty (30) calendar days following the end of each calendar quarter and in accordance with Section C - General Reporting Requirements of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Mid-Continent Coal and Coke
Source Address: 3001 Dickey Road, East Chicago, Indiana 46312
Mailing Address: 915 W. 175th Street, Homewood, IL 60430
Source Modification No.: 089-16263-05224

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Mid-Continent Coal and Coke
Source Address: 3001 Dickey Road, East Chicago, Indiana 46312
Mailing Address: 915 W. 175th Street, Homewood, IL 60430
Source Modification No.: 089-16263-05224
Facility: Coke screening operation
Parameter: Coke throughput
Limit: Less than 121,800 tons per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Mid-Continent Coal and Coke
Source Address: 3001 Dickey Road, East Chicago, Indiana 46312
Mailing Address: 915 W. 175th Street, Homewood, IL 60430
Source Modification No.: 089-16263-05224
Facility: Internal Combustion Engines
Parameter: Diesel Fuel Usage
Limit: No greater than twenty-five (25) kilogallons per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Appendix A: Emissions Calculations
PM Emissions from Coke Processing
Company Name: Mid-Continent Coal and Coke Company
Permit Number: 089-16263-05224
Plant ID: 089-05224
Reviewer: ERG/KC
Date: 10/23/02

Page 1 of 4 TSD App A

Coke Processing Operations (Uncontrolled)

Activity	Capacity (ton/yr)	PM Emission Factor (lb/ton)	Conversion factor	Uncontrolled Emissions (ton/yr)
Storage	** see page 2 **			
Transporting	** see page 2 **			
Unloading Raw Coke	525,600 ton/yr x	0.02 lb/ton x	0.0005 ton/lb x	5.26 tons/yr
Screening	525,600 ton/yr x	0.09 lb/ton x	0.0005 ton/lb x	23.65 tons/yr
Conveying	525,600 ton/yr x	0.09 lb/ton x	0.0005 ton/lb x	23.65 tons/yr
Loading Finished Coke	525,600 ton/yr x	0.1 lb/ton x	0.0005 ton/lb x	26.28 tons/yr
Total Potential to Emit PM =				78.84 tons/yr
Total Potential to Emit PM-10 =				52.56 tons/yr

Coke Processing Operations (Controlled)

Storage	** see page 2 **			
Transporting	** see page 2 **			
Unloading Raw Coke	5.26 tons/yr x	50% emitted after controls =		2.63 tons/yr
Screening	23.65 tons/yr x	50% emitted after controls =		11.83 tons/yr
Conveying	23.65 tons/yr x	50% emitted after controls =		11.83 tons/yr
Loading Finished Coke	26.28 tons/yr x	50% emitted after controls =		13.14 tons/yr
Total Controlled Potential to Emit PM =				39.42 tons/yr
Total Controlled Potential to Emit PM-10 =				26.28 tons/yr

The source wets the coke to control PM/PM10 emissions. This activity has an estimated 50% control efficiency. emissions.

The Emission Factors are from the AIRS Facility Subsystem Source Classification Codes.

Coke Processing Operations (Limited)

Limited throughput = 121,800 ton/yr

Activity	Capacity (ton/yr)	PM Emission Factor (lb/ton)	Conversion factor	Uncontrolled Emissions (ton/yr)
Storage	** see page 2 **			
Transporting	** see page 2 **			
Unloading Raw Coke	121800 ton/yr x	0.02 lb/ton x	0.0005 ton/lb x	1.218 tons/yr
Screening	121800 ton/yr x	0.09 lb/ton x	0.0005 ton/lb x	5.481 tons/yr
Conveying	121800 ton/yr x	0.09 lb/ton x	0.0005 ton/lb x	5.481 tons/yr
Loading Finished Coke	121800 ton/yr x	0.1 lb/ton x	0.0005 ton/lb x	6.09 tons/yr
Total Potential to Emit PM =				18.27 tons/yr
Total Potential to Emit PM-10 =				12.18 tons/yr

Appendix A: Emissions Calculations
PM Emissions from Coke Processing
Company Name: Mid-Continent Coal and Coke Company
Permit Number: 089-16263-05224
Plant ID: 089-05224
Reviewer: ERG/KC
Date: 10/23/02

Fugitive Emissions from Coke Storage Piles

Storage pile emissions, which result from wind erosion, are determined by the following calculations:

$$E_f = 1.7 (s/1.5) * (365-p) / 235 * (f/15)$$

$$= 5.67 \text{ lb/ac/day}$$

where:

s =	4.9	% silt content of material
p =	125	days of rain greater than or equal to 0.01 inches
f =	15	% of wind greater than or equal to 12 mph

$$\text{Storage capacity (SC) of site (tons)} = (\# \text{ acres}) * (43560 \text{ sqft/acre}) * (25 \text{ ft high}) * (1/40 \text{ ton/cuft})$$

$$\text{Storage capacity (SC) of site (tons)} = 27225$$

$$\text{Potential PM Emissions (tpy)} = E_f * SC * (40 \text{ cuft/ton}) * 365 \text{ day/yr} / (2000 \text{ lb/ton} * 43560 \text{ sqft/acre} * 25 \text{ ft})$$

$$\text{Potential PM Emissions (tpy)} = 1.04 \text{ tpy}$$

$$\text{Potential PM}_{10} \text{ Emissions (tpy)} = 1.04 \text{ tpy}$$

Storage Pile Handling

$$EF \text{ (lb/ton)} = k * (0.0032) * (U/5)^{1.3} / (M/2)^{1.4}$$

where:

k value for:

PM	PM ₁₀
0.74	0.35

$$U \text{ value} = 10 \text{ mph}$$

$$M \text{ value} = 12 \%$$

$$\text{Storage capacity} = 27225 \text{ tons}$$

$$\text{PM EF} = 4.75\text{E-}04 \text{ lb/ton}$$

$$\text{PM}_{10} \text{ EF} = 2.24\text{E-}04 \text{ lb/ton}$$

$$\text{PM Emissions (ton/yr)} = EF \text{ (lb/ton)} * \text{Storage Capacity (tons)} * 1/2000 \text{ ton/lb}$$

$$\text{PM Emissions (ton/yr)} = 0.006$$

$$\text{PM}_{10} \text{ Emissions (ton/yr)} = EF \text{ (lb/ton)} * \text{Storage Capacity (tons)} * 1/2000 \text{ ton/lb}$$

$$\text{PM}_{10} \text{ Emissions (ton/yr)} = 0.003$$

Fugitive Emissions from Unpaved Roads

$$4 \text{ trip/hr} \times$$

$$0.0284 \text{ mile/trip} \times$$

$$2 \text{ (round trip)} \times$$

$$8760 \text{ hr/yr} = 1990.272 \text{ miles per year}$$

$$\text{Method 1: } E_f = k * 5.9 * (s/12) * (S/30) * (W/3)^{0.7} * (w/4)^{0.5} * ((365-p)/365)$$

$$= 1.23 \text{ lb/mile}$$

$$\text{where } k = 0.8$$

$$s = 4.8 \text{ mean \% silt content of unpaved roads}$$

$$p = 125 \text{ days of rain greater than or equal to 0.01 inches}$$

$$S = 4 \text{ miles/hr vehicle speed}$$

$$W = 18 \text{ tons average vehicle weight}$$

$$w = 18.0 \text{ wheels}$$

Uncontrolled Fugitive PM/PM₁₀ Emissions

$$\frac{1.23 \text{ lb/mi} \times 1990.272 \text{ mi/yr}}{2000 \text{ lb/ton}} = 1.22 \text{ tons/yr}$$

The source waters the unpaved roads resulting in an estimated 90% PM control efficiency. Therefore,

$$\text{Controlled PM/PM}_{10} \text{ Emissions} = 0.12 \text{ tpy}$$

$$\text{TOTAL FUGITIVE PM EMISSIONS (ton/yr)} = 2.27 \text{ tpy}$$

$$\text{TOTAL FUGITIVE PM}_{10} \text{ EMISSIONS (ton/yr)} = 2.26 \text{ tpy}$$

Appendix A: Emissions Calculations
Potential Emissions from Internal Combustion Engines

Page 3 of 4 TSD App A

Company Name: Mid-Continent Coal & Coke

Permit Number: 089-16263-05224

Plt ID: 089-05224

Reviewer: ERG/KC

Date: 10/23/02

Output
hp

hp-hr/yr

180.0

1576800

Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	2.20E-03	2.20E-03	2.05E-03	3.10E-02	2.47E-03	6.68E-03
Potential Emission in tons/yr	1.73	1.73	1.62	24.44	1.95	5.27

Methodology

hp-hr/yr = hp * 8760 hr/yr

Emission Factors are from AP 42, Chapter 3.3, Table 3.3-1, SCC #2-02-001-02 and 2-03-001-01

Emission (tons/yr) = (hp-hr/yr) x Emission Factor (lb/hp-hr)/2,000 lb/ton

Appendix A: Emissions Calculations
Limited Emissions from Internal Combustion Engines

Page 4 of 4 TSD App A

Company Name: Mid-Continent Coal & Coke

Permit Number: 089-16263-05224

Plt ID: 089-05224

Reviewer: ERG/KC

Date: 10/23/02

Fuel Limit Limited Output
(kgal/yr) (hp-hr/yr)

25	500000
----	--------

	Pollutant					
Emission Factor in lb/hp-hr	PM 2.20E-03	PM10 2.20E-03	SO2 2.05E-03	NOx 3.10E-02	VOC 2.47E-03	CO 6.68E-03
Limited Emission in tons/yr	0.55	0.55	0.51	7.75	0.62	1.67

* Two Reciprocating IC engines

Methodology

hp-hr/yr = hp * 8760 hr/yr

Limited Output (hp-hr/yr) = fuel limit (kgal/yr) x 140,000 (Btu/gal) x 1000 (gal/kgal) x 1/7000 (hp-hr/Btu)

Emission Factors are from AP 42, Chapter 3.3

Emission (tons/yr) = (hp-hr/yr) x Emission Factor (lb/hp-hr)/2,000 lb/ton